

## **ABSTRACT**

A data communications architecture employing serializers and deserializers that reduces data communications latency. In an illustrative implementation, the data communications architecture communicates data across communications links. The  
5 architecture maintains various mechanisms to promote data communications speed and to avoid communication link down time. These mechanisms perform the functions including but not limited to handling uncertain data arrival times, detecting single bit and multi-bit errors, handling communications link failures, addressing failed link training, identifying and marking data as corrupt, and identifying and processing successful data transactions across  
10 the communications link.